**Claims**: I claim:

1. A reflective display comprising:
   a. a linear polarizer,
   b. a reflective half-wave plate,
   c. a plurality of transparent conductive patterned substrates juxtaposed to form a cell structure,
   d. a cholesteric material with a predetermined reflective wavelength and a predetermined thick-to-pitch ratio and with at least one controllable optical ON texture and at least one controllable optical OFF texture respectively,

   wherein the cell structure enclosing the cholesteric material, attaching the linear polarizer on the front outside surface and the reflective half-wave plate on the back outside surface,

   whereby a paper white state will be displayed in the controllable optical ON texture area; and a black state will be displayed in the controllable optical OFF texture area.
2. The reflective display as in claim 1 wherein the paper white ON state is the controllable focal conic state.
3. The reflective display as in claim 1 wherein the black optical OFF state is the controllable planar state.
4. The reflective display as in claim 1 wherein the black optical OFF state is the controllable field-induced nematic state.
5. The reflective display as in claim 1 wherein the reflective half-wave plate is a specula $180^0$ phase shifter.
6. The reflective display as in claim 1 wherein the predetermined reflective wavelength is in near infrared wave band.
7. The reflective display as in claim 1 wherein the predetermined thick-to-pitch ratio is 5 ~ 10.
8. The reflective display as in claim 1 wherein the linear polarizer is a weak linear polarizer with single transmittance at least 60% and polarization efficiency at least 30%.
9. The reflective display as in claim 1 further including a color filter layer positioned inside of the cell substrate to achieve a reflective full color display.

10. A reflective display comprising:
    a. an absorptive linear polarizer
    b. a reflective linear polarizer with crossed polarity to the absorptive linear polarizer,
    c. a plurality of transparent conductive patterned substrates juxtaposed to form a cell structure,
    d. a cholesteric material with a predetermined reflective wavelength and a predetermined thick-to-pitch ratio and with at least one controllable optical ON texture and at least one controllable optical OFF texture respectively,

    wherein the cell structure enclosing the cholesteric material, attaching the absorptive polarizer on the front outside surface and the reflective linear polarizer on the back outside surface,

    whereby a paper white state will be displayed in the controllable optical ON texture area; and a black state will be displayed in the controllable optical OFF texture area.
11. The reflective display as in claim 10 wherein the transmissive optical ON state is the controllable focal conic state.
12. The reflective display as in claim 10 wherein the optical OFF state is the controllable planar state.
13. The reflective display as in claim 10 wherein the optical OFF state is the controllable field-induced nematic state.
14. The reflective display as in claim 10 wherein the reflective linear polarizer is a composite structure of a non-absorptive linear polarizer and an absorptive layer.
15. The reflective display as in claim 10 wherein the reflective linear polarizer is a composite structure of an absorptive linear polarizer and a metal reflector.
16. A reflective display comprising:
    a. an absorptive linear polarizer
    b. a reflective linear polarizer with in-parallel polarity to the absorptive linear polarizer,
    c. a plurality of transparent conductive patterned substrates juxtaposed to form a cell structure,

d. a cholesteric material with a predetermined reflective wavelength and a predetermined thick to pitch ratio and with at least one controllable optical ON texture and at least one controllable OFF texture respectively,

wherein the cell structure enclosing the cholesteric material, attaching the absorptive polarizer on the front outside surface and the reflective linear polarizer on the back outside surface,

whereby a paper white state will be displayed in the controllable optical ON texture area due to the guiding effect of the linear polarizers; and a black state will be displayed in the controllable optical OFF texture area due to the multi-pass absorption effect of the linear polarizers.

17. The reflective display as in claim 16 wherein the optical ON state is the controllable planar state.

18. The reflective display as in claim 16 wherein the optical ON state is the controllable field-induced nematic state.

19. The reflective display as in claim 16 wherein the optical OFF state is the controllable focal conic state.

20. The reflective display as in claim 16 wherein the reflective linear polarizer is a composite structure of a non-absorptive linear polarizer and an absorptive layer.